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(54) Title: AN IMPROVED PROCESS FOR THE PREPARATION OF CEFIXIME

(57) Abstract: There is provided an improved process for preparing cefixime. Thus, for example, 7-amino-3-vinyl-3-cephem-4-carboxylic acid is reacted with 2-mercapto-1,3-benzothiazolyl-(Z)-2-(2-aminothiazol-4-yl)-2-(methoxycarbonyl)-methoxymino acetate in tetrahydrofuran and water at 4°C in the presence of triethylamine. The reaction mass is extracted with ethyl acetate. 7-[2-(2-Amino-4-thiazolyl)-2-(methoxycarbonylmethoxymino)acetamido]-3-vinyl-3-cephem-4-carboxylic acid triethylamine salt present in the aqueous layer is hydrolyzed with sodium hydroxide in less than 30 minutes and aqueous hydrochloric acid is added immediately to adjust the pH to 4.8 to 5.2. Then, aqueous hydrochloric acid is added at 35°C to adjust the pH 2.5 and cooled to crystallize cefixime trihydrate in high purity.